

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

--1 – 26 (Canceled).

27 (Currently amended). A method of measuring temperature of a fluid at various locations along an intravenous fluid line extending between a fluid source and a patient via a temperature sensing device including a base with a groove defined therein forming a receptacle to receive and retain a portion of said fluid line and to allow said fluid line to extend continuously through said temperature sensing device and a temperature sensor to measure temperature of fluid within said retained fluid line portion, wherein said temperature sensing device further includes a plurality of resilient prongs and said receptacle is disposed on said temperature sensing device between said resilient prongs, said method comprising:

(a) providing a desired location along said fluid line residing at any of a plurality of fluid line locations between said fluid source and said patient from which to measure temperature of said fluid;

(b) receiving said temperature sensing device at a portion of said fluid line corresponding to said desired location, wherein said temperature sensing device is selectively securable to said fluid line at any of said plurality of fluid line locations and said plurality of fluid line locations includes at least one proximal fluid line location toward said fluid source and at least one distal fluid line location toward said patient, and wherein step (b) further includes:

(b.1) receiving said desired fluid line portion between said prongs and within said receptacle formed by said groove within said base; and

(b.2) receiving said temperature sensor between said prongs to secure said temperature sensor proximate said desired fluid line portion;

(c) measuring a temperature of fluid flowing through said selected portion of said fluid line via said temperature sensor; and

(d) displaying the measured temperature via a temperature monitor in communication with said temperature sensor.

28 (Original). The method of claim 27, wherein each of said prongs includes a transversely extending projection, and step (b.2) further includes:

(b.2.1) engaging said temperature sensor with said projections to retain said temperature sensor between said prongs.

29 (Canceled).

30 (Previously presented). A method of measuring temperature of a fluid at various locations along an intravenous fluid line extending between a fluid source and a patient via a temperature sensing device including a receptacle to receive and retain a portion of said fluid line and to allow said fluid line to extend continuously through said temperature sensing device and a temperature sensor to measure temperature of fluid within said retained fluid line portion, wherein said temperature sensor includes a sensing tip disposed within said receptacle, said method comprising:

(a) providing a desired location along said fluid line residing at any of a plurality of fluid line locations between said fluid source and said patient from which to measure temperature of said fluid;

(b) receiving said temperature sensing device at a portion of said fluid line corresponding to said desired location, wherein said temperature sensing device is selectively securable to said fluid line at any of said plurality of fluid line locations and said plurality of fluid line locations includes at least one proximal fluid line location toward said fluid source and at least one distal fluid line location toward said patient, and wherein step (b) further includes:

(b.1) piercing a wall of said desired fluid line portion with said sensing tip;

(c) measuring a temperature of fluid flowing through said selected portion of said fluid line via said temperature sensor, wherein step (c) further includes:

(c.1) directly measuring the temperature of fluid flowing through said desired fluid line portion with said sensing tip; and

(d) displaying the measured temperature via a temperature monitor in communication with said temperature sensor.

31 (Previously presented). The method of claim 30, wherein said temperature sensing device further includes an upper member pivotally connected to a lower member, each of said upper and lower members includes a groove disposed on an engaging surface, and said grooves of said upper and lower members are aligned on said engaging surfaces to form said receptacle in the form of a channel upon contact between said engaging surfaces, and step (b.1) further includes:

(b.1.1) receiving said desired fluid line portion within said groove on said engaging surface of said lower member; and

(b.1.2) pivoting of at least one of said upper and lower members with respect to the other of said upper and lower members to contact said engaging surfaces of said upper and lower members and force said sensing tip to pierce said wall of said desired fluid line portion.

32 (Original). The method of claim 31, wherein said engaging surfaces include a locking mechanism, and step (b.1.2) further includes:

(b.1.2.1) locking said upper member against said lower member.

33 (Previously presented). A method of measuring temperature of a fluid at various locations along an intravenous fluid line extending between a fluid source and a patient via a temperature sensing device including a receptacle to receive and retain a portion of said fluid line and to allow said fluid line to extend continuously through said temperature sensing device and a temperature sensor to measure temperature of fluid within said retained fluid line portion, wherein said temperature sensing device further includes a resilient member arranged in a spiral configuration with first and second resilient member ends overlapping each other and separated by a gap, said method comprising:

(a) providing a desired location along said fluid line residing at any of a plurality of fluid line locations between said fluid source and said patient from which to measure temperature of said fluid;

(b) receiving said temperature sensing device at a portion of said fluid line corresponding to said desired location, wherein said temperature sensing device is selectively

securable to said fluid line at any of said plurality of fluid line locations and said plurality of fluid line locations includes at least one proximal fluid line location toward said fluid source and at least one distal fluid line location toward said patient, and wherein step (b) further includes:

(b.1) receiving said desired fluid line portion within said gap; and

(b.2) directing said desired fluid line portion through said gap to be received and secured within said receptacle;

(c) measuring a temperature of fluid flowing through said selected portion of said fluid line via said temperature sensor; and

(d) displaying the measured temperature via a temperature monitor in communication with said temperature sensor.

34 (Currently amended). A method of measuring temperature of a sterile medical solution flowing from a medical solution container and within an intravenous fluid line at selected locations along said fluid line via a temperature sensing device including a fitting including first and second open ends each securable to selected portions of said fluid line, a passage disposed within said fitting and extending between said first and second open ends to permit said sterile medical solution flowing within said fluid line to flow through said fitting and a connection port disposed on an exterior surface of said fitting and including an open proximal end and an open distal end in fluid communication with said passage, and a temperature sensor to measure temperature of said sterile medical solution flowing through said fitting, said method comprising:

(a) receiving said first and second ends of said fitting at selected portions of said fluid line to receive said sterile medical solution within said fitting; and

(b) measuring a temperature of said sterile medical solution flowing through said fitting via said temperature sensor and generating an electrical temperature signal indicating said measured solution temperature to facilitate maintenance of a desired temperature for said medical solution, wherein step (b) further includes:

(b.1) receiving a metallic receptacle within said connection port, wherein said receptacle includes an open proximal end and a closed distal end and directly contacts and conducts thermal energy from said sterile medical solution flowing within said passage, and wherein a substantial majority of said receptacle is fixedly disposed within said connection port and external of said passage to form a fluid tight seal to maintain said sterile medical solution within said passage, and said closed distal end of said receptacle extends slightly beyond the distal end of said connection port and contacts said sterile medical solution flowing within said passage; and

(b.2) removably receiving said temperature sensor within said receptacle open proximal end to measure the temperature of said sterile medical solution flowing through said fitting, wherein ~~at least one portion of said passage located proximally of said receptacle a~~ bottom surface of said temperature sensor contacts, and includes a cross-section with a shape of, said closed distal end ~~the same transverse cross-sectional dimensions as at least one other passage portion located distally of said receptacle.~~

35 (Previously presented). The method of claim 34 further including:

(c) electronically displaying the temperature measured by said temperature sensor via a display device.

36 (Canceled).

37 (Previously presented). The method of claim 34, wherein said connection port extends from an outer surface of said fitting, said temperature sensing device further includes a securing member to secure said temperature sensor to said connection port, wherein said securing member includes a recess defined therein and said temperature sensor is disposed within said recess, and step (b.2) further includes:

(b.2.1) securing said temperature sensor to said connection port via said securing member, wherein said temperature sensor is positioned in contact with said receptacle.

38 (Previously presented). The method of claim 37, wherein said securing member and said connection port include a locking mechanism to releasably secure said securing member to said connection port, and step (b.2.1) further includes:

(b.2.1.1) locking said securing member to said connection port by disposing said connection port within said recess to enable said temperature sensor to contact said receptacle.

39 (Previously presented). A method of measuring temperature of a fluid flowing within an intravenous fluid line at selected locations along said fluid line via a temperature sensing device including a fitting including first and second open ends selectively securable to said fluid line, a passage disposed within said fitting and extending between said first and second open ends to permit fluid flowing within said fluid line to flow through said fitting and a connection port disposed on an exterior surface of said fitting and in fluid communication with said passage, and a temperature sensor to measure temperature of fluid flowing through said

fitting, wherein said fitting further includes a receptacle disposed within said connection port and in direct contact with fluid flowing within said passage and said connection port extends from an outer surface of said fitting, said method comprising:

(a) receiving said first and second ends of said fitting at selected portions of said fluid line;

(b) measuring a temperature of fluid flowing through said fitting via said temperature sensor and generating a temperature signal indicating said measured fluid temperature to facilitate electronic display of said measured fluid temperature, wherein step (b) further includes:

(b.1) receiving said temperature sensor within said connection port to contact said receptacle, wherein said temperature sensing device further includes a securing member to secure said temperature sensor to said connection port, said securing member including a recess defined therein with said temperature sensor disposed within said recess, and wherein said securing member and said connection port include a locking mechanism to releasably secure said securing member to said connection port, said locking mechanism including at least one projection removably attached to an outer surface of said connection port and at least one engagement member disposed on said securing member to engage a corresponding projection, and step (b.1) further includes:

(b.1.1) locking said securing member to said connection port by disposing said connection port within said recess to enable said temperature sensor to contact said receptacle; and

(b.2) measuring the temperature of said receptacle to indirectly determine the temperature of fluid flowing within said fitting;

(c) electronically displaying the temperature measured by said temperature sensor via a display device; and

(d) removing said at least one projection from said connection port via said corresponding engagement member in response to disengagement of said securing member with said connection port to thereby prevent re-engagement of said connection port with said securing member and re-use of said fitting.

40 - 64 (Canceled).

65 (Previously presented). The method of claim 27, wherein step (d) further includes:

(d.1) printing said measured temperature via said temperature monitor.

66 (Previously presented). The method of claim 27, wherein step (d) further includes:

(d.1) recording measured temperatures of said fluid via said temperature monitor.

67 (Previously presented). The method of claim 66, wherein step (d) further includes:

(d.2) printing said recorded measured temperatures via said temperature monitor.

68 (Previously presented). The method of claim 30, wherein step (d) further includes:

(d.1) printing said measured temperature via said temperature monitor.

69 (Previously presented). The method of claim 30, wherein step (d) further includes:

(d.1) recording measured temperatures of said fluid via said temperature monitor.

70 (Previously presented). The method of claim 69, wherein step (d) further includes:

(d.2) printing said recorded measured temperatures via said temperature monitor.

71 (Previously presented). The method of claim 33, wherein step (d) further includes:

(d.1) printing said measured temperature via said temperature monitor.

72 (Previously presented). The method of claim 33, wherein step (d) further includes:

(d.1) recording measured temperatures of said fluid via said temperature monitor.

73 (Previously presented). The method of claim 72, wherein step (d) further includes:

(d.2) printing said recorded measured temperatures via said temperature monitor.

74 (Previously presented). The method of claim 35, wherein step (c) further includes:

(c.1) printing said measured temperature via a temperature monitor.

75 (Previously presented). The method of claim 35, wherein step (c) further includes:

(c.1) recording measured temperatures of said medical solution via a temperature monitor.

76 (Previously presented). The method of claim 75, wherein step (c) further includes:

(c.2) printing said recorded measured temperatures via said temperature monitor.--